

Lawrence Livermore National Laboratory

The Availability of CAS Information to Livermore Users

3/17/08



Dennis Chew

Lawrence Livermore National Laboratory, P. O. Box 808, Livermore, CA 94551

This work performed under the auspices of the U.S. Department of Energy by
Lawrence Livermore National Laboratory under Contract DE-AC52-07NA27344

LLNL-PRES-402154

Available CAS information

- DOE Order 430.1B
 - Facility Information Management System (FIMS) reporting requirements
 - TYSP
- “Knowledge is Power” approach at LLNL – Capture CAS data and integrate into existing processes
 - Cost Savings
 - Efficiency
 - Partnering
- CAS becomes an institutional tool for facility management and planning



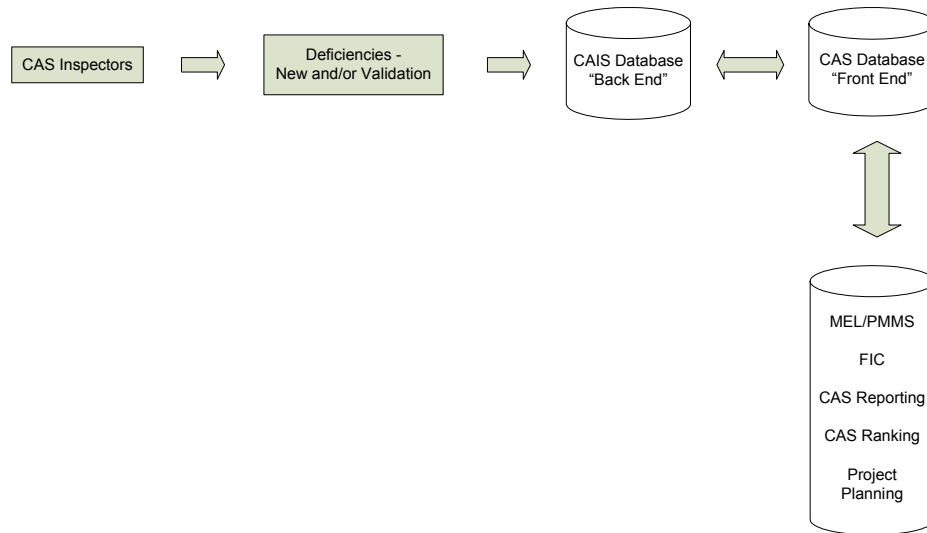
Who uses the CAS information

- The Livermore Site Focus
 - Facility Management personnel
 - Senior Management
 - Building occupants
 - Crafts persons
 - Maintenance Engineering
- Anyone, Anytime



Making CAS available

Livermore CAS Structure

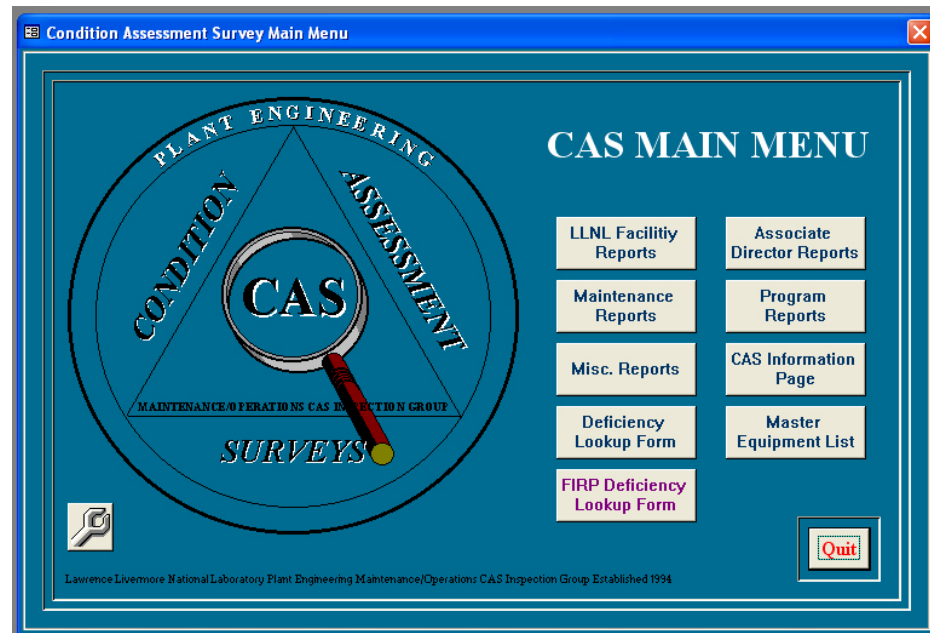


Custom reports were generated

- **Excel**
- **Access**
- **Access w/ GUI's for user defined reporting**
- **Web-based application**

LLNL MS Access CAS interface

- MS Access is a universally installed software at LLNL
- Linked to LLNL's Master Equipment List (MEL) database
- Available on the internal network 24/7
- Self-help
- Updated daily



LLNL MS Access CAS interface

USE TABS TO ACCESS REPORTS

Menu Information | Asset Summary | Asset Detail | WBS Summary | Deficiency Ranking | Asset by Discipline

Asset Deficiency Detail Report

Asset ID:

Lawrence Livermore National Laboratory Plant Engineering Maintenance/Operations CAS Inspection Group Established 1994

All Reported CAS Deficiencies

Enter one or more values to search on:

Asset ID: Area ID: Overall Rank:

Deficiency #: Maint. Area: Maint Rank:

Loc./Equip. ID.: Equip. Type:

Type Description: Defic. Type: Opt. Yr.:

Asset	Defic. #	Rank	Prg R	Mnt	Backl	Total Cost	Yr. Inst.	Equipment ID.	Yr Comp	Condition
-------	----------	------	-------	-----	-------	------------	-----------	---------------	---------	-----------

Record:

LLNL Facility Information Console

- In-house developed geographical information system known as the Facility Information Console – FIC for short
- MapGuide 2007 software based
- Site Map interactive GUI with internal links to LLNL databases including:
 - Key plans
 - Equipment locations
 - Electrical one-lines
 - Drain
 - CAS/CAIS
 - ...etc
- Internal web-site address with security features built-in to protect sensitive information



LLNL Facility Information Console cont....

Facility Information Console, Site 200
Site 300 Map

User, Dennis B Chew Logged in. [Logout](#)

Ctrl + click on a building to open the building Key Plan

Zoom

Layers

- ☒ LLNL_BLDGS
- ☒ LLNL_ROADS

Properties

None Selected

Site Map Tasks

Search the Map

- [Locate a Building](#)

Add Layers to the Map

- [Display Open Work Orders](#)
- [Display Directorates](#)

Reports

- [FPOC Report](#)
- [Directorate Report](#)
- [Work Order Report](#)
- [Download Building Documents](#)

Contact FIC

- [Contact Help](#)

External Links and Reports

- [Facilities Portal](#)
- [FPOC Lookup](#)
- [FITS Reports](#)

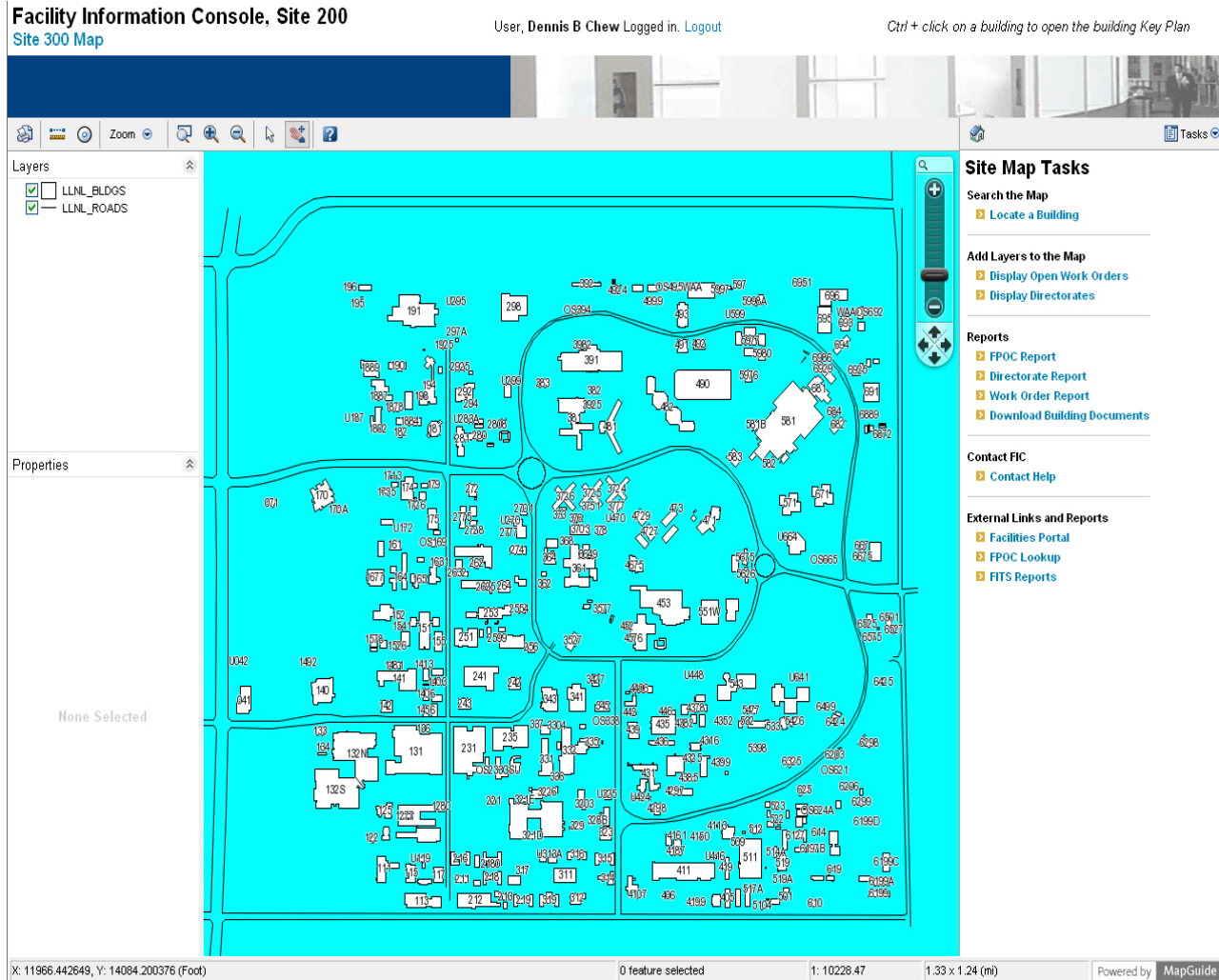
X: 11986.442649, Y: 14064.200376 (Foot)

0 feature selected

1: 10228.47

1.33 x 1.24 (mi)

Powered by MapGuide

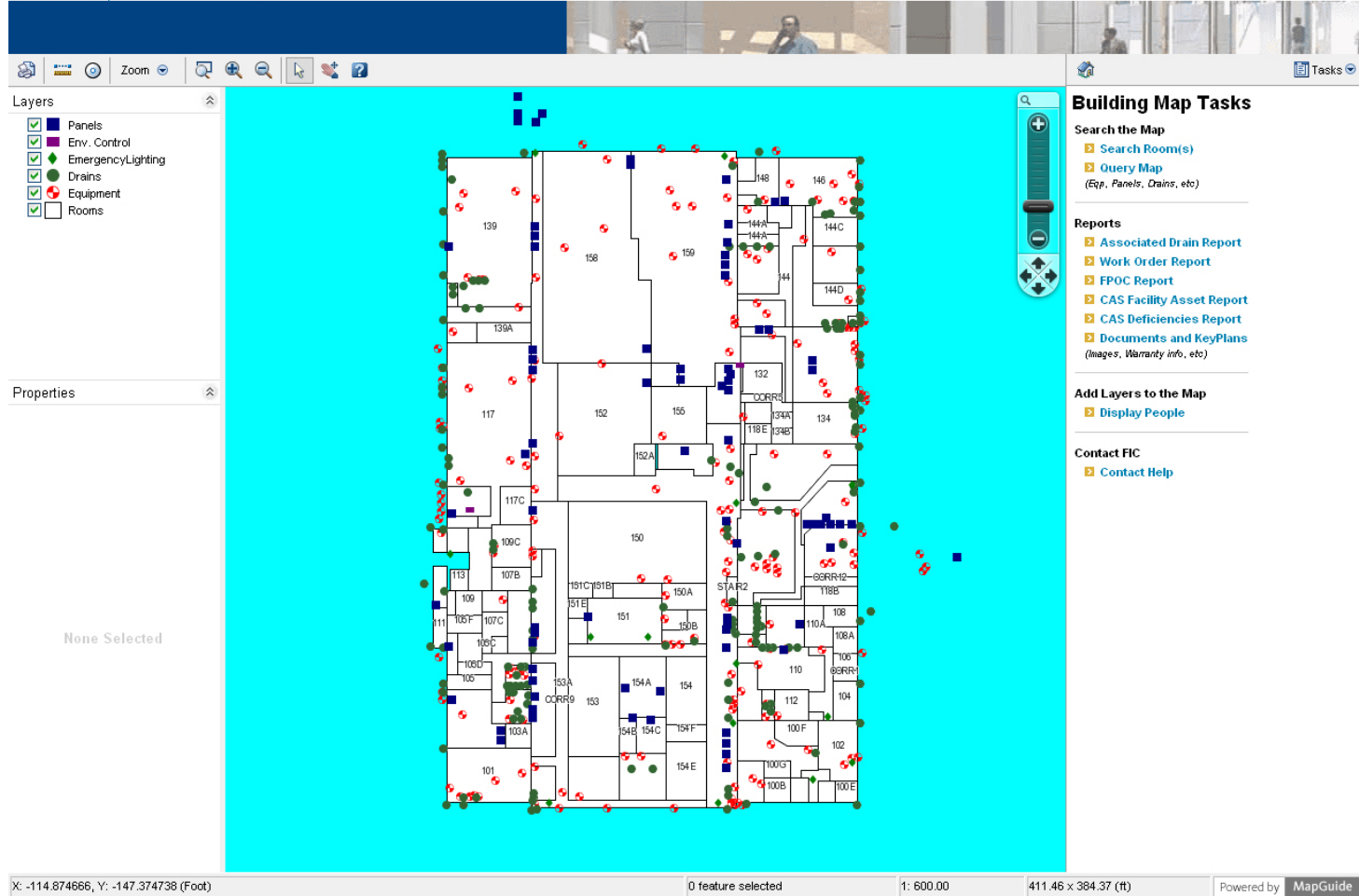


LLNL Facility Information Console cont....

Facility Information Console - Site 200, Building 511, Floor 1

User, Dennis B Chew Logged in. [Logout](#)

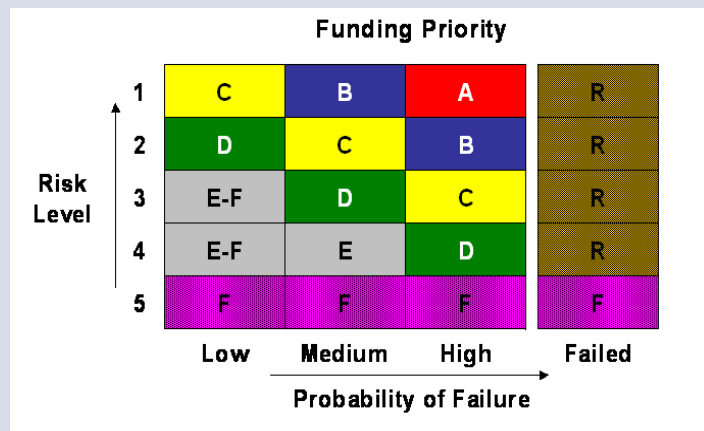
[Back to Site Map](#) Available Floors: [1](#) [2](#)



How LLNL uses the CAS information

Project Prioritization

- Maintenance Reinvestment
- FIRP



- Users provide the risk level
- Maintenance provides the probability of failure

Other Uses

- Work Control process
- Included in the Asset Folder when assets change ownership
- Maintenance Engineering
- Custom reports for facility management personnel